

IN THE CLAIMS:

Amended claims follow.

1. (Currently Amended) A system for detecting changes to conditions of electronic certificates, comprising:

a first computer system monitoring said electronic certificates to detect changes to conditions of said electronic certificates; and

a second computer system coupled to said first computer system, said second computer system being notified by said first computer system of changes in conditions of said electronic certificate;

wherein a plurality of computer systems is logically divided into a plurality of sections including a primary tier, a secondary tier, a tertiary tier, and a fourth tier;

wherein said computer systems in said primary tier are adapted for monitoring changes to conditions of said electronic certificates and notifying said computer systems in said secondary tier of said changes to conditions of said electronic certificates;

wherein said computer systems in said primary tier are adapted for contracting with said computer systems in said secondary tier for determining a type of said changes to conditions of said electronic certificates said computer systems in said secondary tier are notified of by said computer systems in said primary tier;

wherein said computer systems in said secondary tier are adapted for notifying said computer systems in said tertiary tier of said changes to conditions of said electronic certificates;

wherein said computer systems in said secondary tier are adapted for contracting with said computer systems in said tertiary tier for determining a type of said changes to conditions of said electronic certificates said computer systems in said tertiary tier are notified of by said computer systems in said secondary tier;

wherein said computer systems in said tertiary tier are adapted for monitoring changes to conditions of said electronic certificates and notifying said computer systems in said fourth tier of said changes to conditions of said electronic certificates;

wherein said computer systems in said tertiary tier are adapted for contracting with said computer systems in said fourth tier for determining a type of said changes to conditions of said electronic certificates said computer systems in said fourth tier are notified of by said computer systems in said tertiary tier;

wherein said computer systems in said secondary tier are notified of said type of said changes to conditions of said electronic certificates associated with contracts between said computer systems in said primary tier and said computer systems in said secondary tier; said computer systems in said tertiary tier are notified of said type of said changes to conditions of said electronic certificates associated with said contracts between said computer systems in said primary tier and said computer systems in said secondary tier, and contracts between said computer systems in said secondary tier and said computer systems in said tertiary tier; and said computer systems in said fourth tier are notified of said type of said changes to conditions of said electronic certificates associated with said contracts between said computer systems in said primary tier and said computer systems in said secondary tier, said contracts between said computer systems in said secondary tier and said computer systems in said tertiary tier, and contracts between said computer systems in said tertiary tier and said computer systems in said fourth tier;

wherein said computer systems in said tiers are logically organized as a tree.

2. (Original) The system of claim 1, wherein said first computer system includes a detecting module for monitoring changes to conditions of said electronic certificates and a notifying module for notifying said second computer system.

3. (Original) The system of claim 2, wherein said first computer system further includes a processor for executing said detecting module and notifying module.
4. (Original) The system of claim 3, wherein said second computer system includes a notification module.
5. (Original) The system of claim 4, wherein said first computer system further includes a contracting module for negotiating a contract.
6. (Original) The system of claim 5, where said first computer system further includes an electronic certificate server for providing access to said electronic certificates.
7. (Original) The system of claim 5, wherein said first computer system is coupled to an electronic certificate server including said electronic certificates.
8. (Original) The system of claim 1, wherein said first computer system includes an electronic certificate server for providing access to said electronic certificates.
9. (Original) The system of claim 1, wherein said first computer system is coupled to an electronic certificate server for providing access to said electronic certificates.
10. (Original) The system of claim 1, wherein said second computer system includes a notification module.
11. (Original) The system of claim 1, wherein said second computer system is notified by said first computer system through a third computer system.
12. (Original) The system of claim 3, wherein said second computer system is

notified by said first computer system through a third computer system.

13. (Original) The system of claim 4, wherein said second computer system is notified by said first computer system through a third computer system.
14. (Original) The system of claim 10, wherein said second computer system is notified by said first computer system through a third computer system.
15. (Original) The system of claim 1, wherein said first computer system is a first server and said second computer system is a second server.
16. (Original) The system of claim 1, wherein said first computer system is a first CAP server and said second computer system is a second CAP server.
17. (Currently Amended) An electronic certificates system, comprising:
  - logic for monitoring one or more electronic certificates to detect a change to conditions of said electronic certificates; and
  - logic for providing notification of said change to conditions of said electronic certificates;
  - wherein a plurality of computer systems is logically divided into a plurality of sections including a primary tier, a secondary tier, a tertiary tier, and a fourth tier;
  - wherein said computer systems in said primary tier are adapted for monitoring changes to conditions of said electronic certificates and notifying said computer systems in said secondary tier of said changes to conditions of said electronic certificates;
  - wherein said computer systems in said primary tier are adapted for contracting with said computer systems in said secondary tier for determining a type of said changes to conditions of said electronic certificates said computer systems in said secondary tier are notified of by said computer systems in said primary tier;
  - wherein said computer systems in said secondary tier are adapted for monitoring changes to conditions of said electronic certificates and notifying

said computer systems in said tertiary tier of said changes to conditions of said electronic certificates;

wherein said computer systems in said secondary tier are adapted for contracting with said computer systems in said tertiary tier for determining a type of said changes to conditions of said electronic certificates said computer systems in said tertiary tier are notified of by said computer systems in said secondary tier;

wherein said computer systems in said tertiary tier are adapted for monitoring changes to conditions of said electronic certificates and notifying said computer systems in said fourth tier of said changes to conditions of said electronic certificates;

wherein said computer systems in said tertiary tier are adapted for contracting with said computer systems in said fourth tier for determining a type of said changes to conditions of said electronic certificates said computer systems in said fourth tier are notified of by said computer systems in said tertiary tier;

wherein said computer systems in said secondary tier are notified of said type of said changes to conditions of said electronic certificates associated with contracts between said computer systems in said primary tier and said computer systems in said secondary tier; said computer systems in said tertiary tier are notified of said type of said changes to conditions of said electronic certificates associated with said contracts between said computer systems in said primary tier and said computer systems in said secondary tier, and contracts between said computer systems in said secondary tier and said computer systems in said tertiary tier; and said computer systems in said fourth tier are notified of said type of said changes to conditions of said electronic certificates associated with said contracts between said computer systems in said primary tier and said computer systems in said secondary tier, said contracts between said computer systems in said secondary tier and said computer systems in said tertiary tier, and contracts between said computer systems in said tertiary tier and said computer systems in said fourth tier;

wherein said computer systems in said tiers are logically organized as a ring.

18. (Currently Amended) A method, comprising the steps of:

detecting a change to a condition of an electronic certificate with a first computer system; and

providing notification to a second computer system of said detected change to a condition of an electronic certificate detected by said first computer system;

wherein a plurality of computer systems is logically divided into a plurality of sections including a primary tier, a secondary tier, a tertiary tier, and a fourth tier;

wherein said computer systems in said primary tier are adapted for monitoring changes to conditions of said electronic certificates and notifying said computer systems in said secondary tier of said changes to conditions of said electronic certificates;

wherein said computer systems in said primary tier are adapted for contracting with said computer systems in said secondary tier for determining a type of said changes to conditions of said electronic certificates said computer systems in said secondary tier are notified of by said computer systems in said primary tier;

wherein said computer systems in said secondary tier are adapted for notifying said computer systems in said tertiary tier of said changes to conditions of said electronic certificates;

wherein said computer systems in said secondary tier are adapted for contracting with said computer systems in said tertiary tier for determining a type of said changes to conditions of said electronic certificates said computer systems in said tertiary tier are notified of by said computer systems in said secondary tier;

wherein said computer systems in said tertiary tier are adapted for monitoring changes to conditions of said electronic certificates and notifying said computer systems in said fourth tier of said changes to conditions of said electronic certificates;

wherein said computer systems in said tertiary tier are adapted for contracting with said computer systems in said fourth tier for determining a type of said changes to conditions of said electronic certificates said computer systems in said fourth tier are notified of by said computer systems in said tertiary tier;

wherein said computer systems in said secondary tier are notified of said type of said changes to conditions of said electronic certificates associated with contracts between said computer systems in said primary tier and said computer systems in said secondary tier; said computer systems in said tertiary tier are notified of said type of said changes to conditions of said electronic certificates associated with said contracts between said computer systems in said primary tier and said computer systems in said secondary tier, and contracts between said computer systems in said secondary tier and said computer systems in said tertiary tier; and said computer systems in said fourth tier are notified of said type of said changes to conditions of said electronic certificates associated with said contracts between said computer systems in said primary tier and said computer systems in said secondary tier, said contracts between said computer systems in said secondary tier and said computer systems in said tertiary tier, and contracts between said computer systems in said tertiary tier and said computer systems in said fourth tier;

wherein said computer systems in said tiers are logically organized as a web.

19. (Original) The method of claim 18, further comprising the step of creating an agreement between said first computer system and said second computer system defining which changes in conditions should trigger a notification.
20. (Original) The method of claim 18, further comprising the step of recording said detected change in condition in said first computer system.

21. (Original) The method of claim 18, further comprising the step of determining whether said detected change of condition is of interest to said second computer system.
22. (Original) The method of claim 19, further comprising the step of determining whether said detected change of condition is of interest to said second computer system.
23. (Original) The method of claim 20, further comprising the step of determining whether said detected change of condition is of interest to said second computer system.
24. (Original) The method of claim 18, further comprising the step of determining a method of notification and a type of information to be relayed to said second computer system for said detected change to a condition of an electronic certificate.
25. (Original) The method of claim 19, further comprising the step of determining a method of notification and a type of information to be relayed to said second computer system for said detected change to a condition of an electronic certificate.
26. (Original) The method of claim 20, further comprising the step of determining a method of notification and a type of information to be relayed to said second computer system for said detected change to a condition of an electronic certificate.
27. (Original) The method of claim 23, further comprising the step of determining a method of notification and a type of information to be relayed to said second computer system for said detected change to a condition of an electronic certificate.
28. (Original) The method of claim 18, wherein said first computer system is a

first server and said second computer system is a second server.

29. (Original) The method of claim 18, wherein said first computer system is a first CAP server and said second computer system is a second CAP server.

30. – 33. (Cancelled)